

1

2

3

4

1

2

1

2

1

2

3

1

2

3

1

2

1

1

2

1

2

1

2

- 9 -

1 11. The oral care device of claim 1 wherein the rocking element has a thickness of
2 from 0.080 to 0.100 inches.

1 12. The oral care device of claim 1 wherein the rocking element has an overall
2 diameter less than 1.000 inches.

1 13. The oral care device of claim 1 wherein the rocking element has an overall
2 diameter of from 0.500 to 0.700 inches.

1 14. The oral care device of claim 1 wherein the rocking element has an overall
2 diameter of from 0.550 to 0.650 inches.

1 15. The oral care device of claim 1 wherein the rocking element is formed of a
2 material having a durometer reading of from about 20 to 90 Shore A.

1 16. The oral care device of claim 1 wherein the rocking element is formed of a
2 material having a durometer reading of from about 40 to 80 Shore A.

1 17. The oral care device of claim 1 wherein the central portion further includes an
2 opening therethrough sized to allow the rocking element to conform to a tooth's shape during
3 use.

1 18. The oral care device of claim 1 wherein each protrusion has a double taper from a
2 relatively wide base to a relatively narrow tip.

1 19. The oral care device of claim 18 wherein each protrusion is generally diamond-
2 shaped in cross section.

1 20. The oral care device of claim 18 wherein each protrusion is generally triangular
2 in cross section.

1 21. The oral care device of claim 1 wherein the rocking element is co-molded with
2 the head.

1 22. The oral care device of claim 1 wherein the rocking element further comprises a
2 mounting element sized to mount into a hole in the head.

1 23. The oral care device of claim 1 further comprising a second rocking element.

1 24. The oral care device of claim 1 wherein the central portion is spherical.

1 25. The oral care device of claim 24 wherein the protrusions are located on the upper
2 hemisphere of the central portion.

1 26. The oral care device of claim 24 wherein the protrusions are spaced less than 90
2 degrees apart.

1 27. The oral care device of claim 24 wherein the protrusions are spaced from about
2 65 to 80 degrees apart.

1 28. The oral care device of claim 24 wherein the protrusions are cylindrical.

1 29. The oral care device of claim 24 wherein the protrusions have a base diameter
2 less than 0.100 inches.

1 30. The oral care device of claim 24 wherein the protrusions have a base diameter
2 from about 0.010 inches to 0.100 inches.

1 31. The oral care device of claim 24 wherein the protrusions have a base diameter
2 from about 0.040 inches to 0.060 inches.

1 32. The oral care device of claim 24 wherein the protrusions have a length less than
2 0.100 inches.

1 33. The oral care device of claim 24 wherein the protrusions have a length of from
2 about 0.050 inches to 0.175 inches.

1 34. The oral care device of claim 24 wherein the protrusions have a length of from
2 about 0.070 inches to 0.080 inches.

1 35. The oral care device of claim 24 wherein the spherical central portion has a
2 diameter less than 0.300 inches.

1 36. The oral care device of claim 24 wherein the spherical central portion has a
2 diameter from about 0.100 inches to 0.300 inches.

1 37. The oral care device of claim 24 wherein the spherical central portion has a
2 diameter from about 0.200 inches to 0.250 inches.

1 38. The oral care device of claim 24 wherein the movement of the rocking element
2 during brushing is substantially omnidirectional.

1 39. The oral care device of claim 1 or 24 wherein the rocking element further
2 comprises a shaft, mounted on the central portion to act as a fulcrum for rocking
3 movement of the rocking element.

1 40. An oral care device comprising
2 a body having a head shaped for insertion into the oral cavity;
3 a rocking element mounted on the head, the rocking element including a central
4 portion and a plurality of protrusions extending radially from the central portion, the
5 protrusions tapering from a relatively wide base to a relatively narrow tip, the tips being
6 shaped and sized to penetrate the interproximal and subgingival region.

1 41. A method of oral hygiene comprising:
2 inserting into the oral cavity of a human an oral brush that comprises a body having a
3 head, tooth cleansing elements extending from a top surface of the head, and a rocking

42. The method of claim 41 wherein the brushing step comprises using a motion that causes the protrusions to penetrate between adjacent teeth, resulting in interproximal penetration and gum stimulation.

1